

We claim:

1-16. (Previously canceled)

17. (Previously Presented) A method for laser vision correction, comprising providing a controlled biodynamic response in corneal tissue of an eye by inflicting a controlled trauma to an exposed corneal surface outside an identified optical zone for a myopia correcting nominal laser ablation of the cornea.

18. (Previously Presented) The method of claim 17, wherein providing the controlled biodynamic response includes a flattening of the corneal surface over at least a central portion of the optical zone.

19. (Previously Presented) The method of claim 17, wherein inflicting the controlled trauma comprises laser ablating a portion of the exposed corneal surface.

20. (Previously Presented) The method of claim 19, wherein laser ablating a portion of the exposed corneal surface comprises ablating at least a portion of a ring of corneal tissue having a circular or an acircular shape.

21. (Previously Presented) The method of claim 20, wherein the at least a portion of the ablation ring has an inner boundary adjacent an outer boundary of the optical zone.

22. (Previously Presented) The method of claim 21, wherein the inner boundary of the at least a portion of the ablation ring begins at a distance, d, from the outer boundary of the optical zone, where $200\mu\text{m} < d < 600\mu\text{m}$.

23. (Previously Presented) The method of claim 20, comprising ablating the at least a portion of the ring to a depth, t, where $10\mu\text{m} < t < 70\mu\text{m}$, and having a width, w.

24. (Previously Presented) The method of claim 23, wherein t and w are variable as a function of biodynamic ablation location on the cornea.

25. (Previously Presented) The method of claim 23, wherein w is a function of the laser beam diameter on the cornea.

26. (Previously Presented) The method of claim 23, wherein w has a nominal value of about 1mm.

27. (Previously Presented) The method of claim 20, comprising ablating the at least a portion of the ring within a transition zone of the nominal ablation of the cornea.

28. (Previously Presented) The method of claim 17, wherein providing the controlled biodynamic response comprises creating a tissue ablation volume for a desired refractive correction that is less than a corresponding tissue ablation volume for the desired refractive correction in the absence of the controlled biodynamic response.

29. (Previously Presented) The method of claim 28, wherein the lessened tissue ablation volume has a smaller ablation depth over the optical zone than a corresponding ablation depth over the optical zone in the absence of the controlled biodynamic response.

30. (Previously Presented) The method of claim 17, wherein providing the controlled biodynamic response comprises empirically determining the controlled biodynamic response from a statistically significant population.

31. (Previously Presented) The method of claim 17, wherein providing the controlled biodynamic response comprises delivering a plurality of photoablative light pulses onto the corneal surface, all of which have only a 1mm diameter.

32. (Previously Presented) The method of claim 31, wherein the plurality of photoablative light pulses have a direct aperture transmission portion and a diffractive aperture transmission portion so as to produce a soft-spot beam intensity profile.

33. (Previously Presented) A method for a LASIK or a LASEK myopia correction, comprising:

ablatiing a volume of corneal tissue outside an optical zone of a nominal ablation region of the cornea.

34. (Previously Presented) The method of claim 33, wherein the volume of ablated corneal tissue is in the form of at least a portion of a ring of ablated corneal tissue having a circular or an acircular shape.

35. (Previously Presented) The method of claim 34, wherein the at least a portion of the ring has an inner boundary adjacent an outer boundary of the optical zone.

36. (Previously Presented) The method of claim 35, wherein the inner boundary of the at least a portion of the ablation ring begins at a distance, d, from the outer boundary of the optical zone, where $200\mu\text{m} < d < 600\mu\text{m}$.

37. (Previously Presented) The method of claim 36, comprising ablating the at least a portion of the ring to a depth, t, where $10\mu\text{m} < t < 70\mu\text{m}$, and a width, w.

38. **(Previously Presented)** The method of claim 37, wherein t and w are variable as a function of biodynamic ablation location on the cornea.
39. **(Previously Presented)** The method of claim 37, wherein w is a function of the laser beam diameter on the cornea.
40. **(Previously Presented)** The method of claim 37, wherein w has a nominal value of about 1mm.
41. **(Previously Presented)** The method of claim 40, comprising ablating the at least a portion of the ring within a transition zone of the nominal ablation of the cornea.
42. **(Previously Presented)** The method of claim 33, wherein ablating the volume of corneal tissue comprises creating a tissue nominal ablation volume in the optical zone for a desired refractive correction that is less than a corresponding tissue nominal ablation volume in the optical zone for the desired refractive correction in the absence of the controlled biodynamic response.
43. **(Previously Presented)** The method of claim 42, wherein the lessened tissue nominal ablation volume has a smaller ablation depth over the optical zone than a corresponding ablation depth over the optical zone in the absence of ablating the volume of corneal tissue.
44. **(Withdrawn)** In an improved device readable medium having stored therein an executable instruction for directing an ophthalmic vision correcting laser platform to deliver a myopia correcting nominal ablation in an optical zone of a corneal surface, the improvement comprising an executable instruction stored in the medium for directing the ophthalmic vision correcting laser platform to deliver a myopia correction enhancing biodynamic ablation in the corneal surface outside of the optical zone.
45. **(Withdrawn)** The device readable medium of claim 44, wherein the biodynamic ablation has the form of at least a portion of a ring having an inner boundary adjacent an outer boundary of the optical zone, wherein the ring has a circular or an acircular shape.
46. **(Withdrawn)** The device readable medium of claim 45, wherein the inner boundary of the biodynamic ablation is separated from the outer boundary of the optical zone by a distance, d, where $200\mu\text{m} < d < 600\mu\text{m}$.
47. **(Withdrawn)** The device readable medium of claim 45, wherein the at least a portion of the ring has a depth, t, where $10\mu\text{m} < t < 70\mu\text{m}$, and a width, w.

48. **(Withdrawn)** The device readable medium of claim 47, wherein t and w are variable as a function of biodynamic ablation location on the cornea.

49. **(Withdrawn)** The device readable medium of claim 47, wherein w is a function of the laser beam diameter on the cornea

50. **(Withdrawn)** The method of claim 45, wherein w has a nominal value of about 1mm.

51. **(Withdrawn)** The device readable medium of claim 45, wherein the at least a portion of the ring is located within a transition zone of the nominal ablation of the cornea.

52. **(Withdrawn)** The device readable medium of claim 45, wherein the controlled delivered biodynamic ablation comprises a plurality of photoablative light pulses delivered to the corneal surface, all of which have only a 1mm diameter.